

ABSTRACT

(Fig. 4)

A method of fault classification in a plasma process chamber
5 powered by an RF source comprises initially running a
plurality of different baseline plasma processes on the
chamber. For each baseline process, the magnitudes of a
plurality of Fourier components of delivered RF power are
determined and stored as an impedance fingerprint for that
10 baseline process. In the case of a fault, one or more of
the baseline processes is repeated according to a
predetermined decision tree to determine the current
fingerprints and classify the fault by comparing the current
fingerprints with the original fingerprints.

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